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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,103	06/25/2001	Takahiro Ishizuka	003510-099	7294

7590 04/19/2004

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/887,103

Applicant(s)

ISHIZUKA, TAKAHIRO

Examiner

Callie E. Shosho

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1714

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 March 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1,3-7,9-11,13-17,19 and 21.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

Callie E. Shosho  
Primary Examiner  
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**Attachment to Advisory Action**

1. Applicant's arguments filed 3/24/04 have been fully considered but they are not persuasive.

Specifically, in the office action mailed 11/24/03, the present claims were rejected using a combination of references including Ishii et al. (U.S. 5,302,654) and Breton et al. (U.S. 6,384,108). Ishii et al. disclose water-based ink jet ink used in ink jet printer to form images wherein the ink comprises colored particulates containing oil-soluble dye and block copolymer which has number average molecular weight of 1,000-10,000 and is formed from hydrophobic segment which is obtained from only hydrophobic monomers such as (meth)acrylates and from hydrophilic segment which is obtained from only hydrophilic monomers such as (meth)acrylic acid. However, there is no disclosure in Ishii et al. regarding the amount of ionic group in the block copolymer. That is, Ishii et al. that the block copolymer is obtained from hydrophilic monomer including those containing ionic group such as acrylic acid, but there is no disclosure regarding the amount of ionic group present, which is why Breton et al. was combined with Ishii et al. Breton is drawn to ink jet ink comprising self-emulsifiable polymer containing dye as is Ishii et al. Further, Breton et al. disclose using 2.5-15 mol% hydrophilic monomer in the polymer to control the particle size of the polymer (col.3, lines 45-48 and col.4, lines 21-47).

In response, applicant argues that there is no motivation to combine Ishii et al. with Breton et al. given that Ishii et al. already disclose controlling the particle size of the polymer

However, it is noted that col.4, lines 11-12 of Ishii et al. pointed to by applicant appear to refer to the control of the particle size of the polymer microparticles formed from polymerizing monomer in-situ in the presence of the self-emulsifiable polymer while Breton et al. teaches


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controlling the particle size of the self-emulsifiable polymer itself. Breton et al. disclose that the amount of hydrophilic groups present in the polymer controls the emulsifying characteristics of the resin and enable the polymer to self-emulsify to the desired particle size. The polymer whose particle size is controlled in Ishii et al. is different than the polymer whose particle size is controlled in Breton et al.

Specifically, as seen in col.3, lines 47-65, Ishii et al. disclose dissolving self-emulsifiable polymer, i.e. block copolymer formed from hydrophilic segment and hydrophobic segment, in non-aqueous solvent and then either (i) adding colorant and monomer followed by emulsification and polymerization of the monomer to form polymer microparticles or (ii) adding colorant and emulsifying and then adding monomer followed by polymerization of the monomer to form polymer microparticles. As noted in col.4, lines 11-13, it is the polymer microparticles whose particle size is controlled by selecting suitable dispersant or polymerization conditions not the self-emulsifiable polymer.

Thus, given that Breton et al. is drawn to the same field of endeavor as Ishii et al., i.e. self-emulsifiable polymer for ink jet ink, and given that Breton et al. disclose motivation for controlling the amount of hydrophilic monomer in the self-emulsifiable polymer, i.e. to control the particle size, it is the examiner's position that the combination of Ishii et al. with Breton et al. is proper.

CS  
4/14/04

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714